

**IX. Laparotomy for Perforated Typhoid Ulcer.** By R. B. BONTECOU, M. D. (Troy, N. Y.) A man æt. 25, had been affected with typhoid fever for fifteen days when he was seized with right iliac pain which increased during the two following days, on the latter of which collapse set in evidently from intestinal perforation. On abdominal section two perforations were discovered and closed, but unfortunately the operation had been delayed too long after the first perforation and *death* occurred before he recovered from the anæsthetic. — *Jour. Am. Med. Assn.*, Jan. 28, 1888.

**X. Laparotomy for Perforated Typhoid Ulcer.** By THOMAS S. K. MORTON, M. D. (Philadelphia) and THOMAS G. MORTON, M. D. (Philadelphia.) The author of the former paper quotes at length the case of KUSSMAUL of Strasburg, operated upon in October, 1885 and reported by Luecke in the *Deutsche Zeitschrift für Chirurgie* of the last year. A woman, æt. 28, developed typhoid fever subsequent to labor, and eight days later was seized with agonizing abdominal pain and symptoms of collapse. Under a diagnosis of perforated typhoid ulcer, the abdomen was promptly opened in the median line from the umbilicus to the symphysis. A single small perforation was found about a foot and a half above the ileo-cæcal valve; from it flowed yellow feculent material. The portion of the gut including the perforation was resected, the toilet of the peritoneum performed, and the external wound closed and dressed. *Death* occurred in eleven hours without reaction from shock. Autopsy showed broncho-pneumonia and hypostatic congestion, foul pus in Douglas' sac, and general peritoneal fibrinous exudate.

In 1886, MR. T. H. BARTLEET, of Birmingham, in a case of perforated typhoid ulcer, made a median abdominal incision discovering great fæcal extravasation. After an unsuccessful hurried search for the perforation, the cavity was irrigated, a drain inserted, and the parietal incision closed, death occurring on the second day thereafter.

On the 13th day of November, 1887 T. G. MORTON operated upon a man, æt. 23, the subject of an apparently light attack of typhoid fever

but in whom intestinal perforation had occurred. Through an incision from the umbilicus to the symphysis the bowel opening was found and closed by turning in the whole area of the ulceration; another ulcer which threatened early perforation was also similarly turned in. The abdomen was thoroughly cleansed, and the wound closed and dressed. Six hours after the operation the patient sank into collapse and *death* supervened within an hour.

While these operations do not present a very encouraging outlook, they provide a precedent for an operation which must of necessity always be a forlorn hope. If successful results are to be obtained they will come from operations undertaken with the least possible delay after the accident. Three methods offer themselves (1) closing the perforation with Lembert's sutures, (2) resection of the diseased gut, (3) forming an artificial anus. A thorough examination of the bowels should be made to discover any other ulcer which is likely to perforate. —*Med. News*, Nov. 26 and Dec. 24, 1887.

JAMES E. PILCHER (U. S. Army).

### EXTREMITIES.

**I. A Case of Simultaneous Quadruple Amputation.** By G. C. WALLACE, M. D. (Rock Rapids, Iowa.) A German boy, æt. 16, of robust constitution, was overcome by cold, suffering injuries which required the following operations fifteen days after the accident: (1) Both the right and (2) left arms were taken off half way between the elbow and wrist; (3) the right leg was amputated about three inches above the ankle joint; (4) a portion of the left foot was removed by an incision through the first row of tarsal bones, leaving three of them and cutting off the heel, leaving the os calcis exposed for over one inch; although gangrene of the soft parts had set in, the bone was healthy, and it was accordingly left in the expectation that the soft parts would again cover it, which ultimately occurred; (5) the point of the nose was excised. All the amputations were performed before any of the stumps were dressed or any vessels ligatured. The wounds were irrigated with a sublimate solution and dressed with an extemporized sublimate dressing. He was discharged 51 days later with all the